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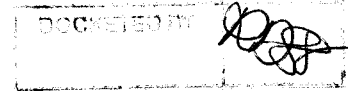
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AZ CORP COMMISSION  
DOCKET CONTROL

Arizona Corporation Commission  
DOCKETED

January 31, 2011

JAN 31 2011



Docket Control  
Arizona Corporation Commission  
1200 W. Washington  
Phoenix, AZ 85007

RE: ARIZONA PUBLIC SERVICE COMPANY TIME-OF-USE RATES ET-2 AND ECT-2  
ANNUAL REPORT, DECISION NO. 68645  
DOCKET NO. E-01345A-05-0674

Pursuant to Decision No. 68645:

APS will file with Docket Control annual reports that detail the load shape of the participants in the experimental rates ET-2 and ECT-2.

Attached is Arizona Public Service Company's 2010 annual report on the residential TOU (time-of-use) rates ET-2 and ECT-2. Also attached is a red-lined amended 2009 TOU Annual Report.

If you or your staff has any questions regarding this information, please contact Chuck Miessner at (602) 250-3081.

Sincerely,

Susan Casady

SC/kc

cc: Steve Olea  
Terri Ford  
Brian Bozzo

**Arizona Public Service Company  
Residential Time-of-use Rates ET-2, ECT-2  
Compliance Report, Decision No. 68645, Docket  
No. E-01345A-05-0674  
Initial Filing, Docket No E-01345A– 07-0448  
January 31, 2011**

**Arizona Public Service Company**  
**Residential Time-of-use Rates ET-2, ECT-2**  
**Compliance Report, Decision No. 68645, Docket No. E-01345A-05-0674**  
**Initial Filing, Docket No E-01345A- 07-0448**  
**January 31, 2011**

## **Background**

In July 2006, APS implemented the “series-2” residential time-of-use rate schedules, ET-2 and ECT-2, which have an on-peak period of noon to 7:00 p.m. Rate Schedule ET-2 has on-peak and off-peak energy charges. Rate Schedule ECT-2 has an on-peak demand charge in addition to on-peak and off-peak energy charges. The Company is also serving customers on the “series-1” residential time-of-use rate schedules, ET-1 and ECT-1R, which have an on-peak time period of 9:00 a.m. to 9:00 p.m. The series-1 time-of-use rate schedules were closed to new customers effective January 1, 2010. However, existing customers can continue service on the rates.

## **Customer Participation**

As of December 2010, 147,307 customers are participating in the ET-2 rate. The year-over-year increase is 58,324 customers, a growth rate of 65.5%. For ECT-2, the participation is 43,732 customers and the year-over-year increase is 9,913, which is a growth rate of 29.3%. Overall, as of December 2010, the series-2 time-of-use rates have a total participation level of 191,039. This represents a year-over-year increase in customer participation of 68,237, which is a 55.6% increase.

## **Load Shapes**

Average daily load shapes for the winter and summer seasons are derived from recorded load research data. The summer seasonal load shapes consist of hourly load data from May 2010 through October 2010. The winter load shape includes data from December 2009 through April 2010 and November 2010. The attached load shapes are provided for weekday and weekend days. For comparison, the load shapes for rate schedules ET-1 and ECT-1R are also provided. See Graphs 1 through 8 in Appendix A.

## **Peak Usage and Shifting**

The ET-2 and ECT-2 summer weekday load shapes show a modest increase in usage after 7:00 p.m., when the on-peak period expires, which indicates that usage is being shifted to the off-peak hours. This impact is more pronounced for the ECT-2 rate, which has an on-peak demand charge in addition to on-peak and off-peak energy charges.

In addition, as shown in Table 1, the percent kWh consumed during the noon to 7:00 p.m. on peak period for the summer season is approximately 24% for ET-2 and 22% for ECT-2, based on load research data. By comparison, the summer on-peak usage for the same time period (noon to 7:00 p.m.) for rate schedule ET-1 and ECT-1R, which have a 12 hour on-peak period, is approximately 24% and 25% respectively. This suggests that although the on-peak periods differ between the series-1 and series-2 time-of-use rates, the participants on the series-2 time-of-use rates are displaying similar, but slightly lower,

summer on-peak consumption pattern and slightly more shifting of energy to the off-peak period when compared with the series-1 time-of-use rates.

Table 1.

**Peak Consumption  
(12pm to 7pm)  
Time-Of-Use Rates**

Rate Schedule	On-Peak Usage – Summer	On-Peak Usage – Winter
ET-2	24%	18%
ECT-2	22%	17%
ET-1	24%	16%
ECT-1R	25%	17%

1. ET-1 and ECT-1R on-peak usage are based on same on-peak hours as ET-2 and ECT-2.

### Customer Bill Savings

As depicted in Table 2, customer savings from the series-2 time-of-use rates are significant when compared to the estimated revenue that participating customers would have paid under the standard non-time-of-use rate E-12. The total estimated bill savings is \$51,202,651 for ET-2, and \$42,569,145 for ECT-2, for a combined savings of \$93,771,795 or 22%.

Table 2.

**Estimated Customer Bill Savings  
Time-of-use Rates  
(ET-2 and ECT-2)**

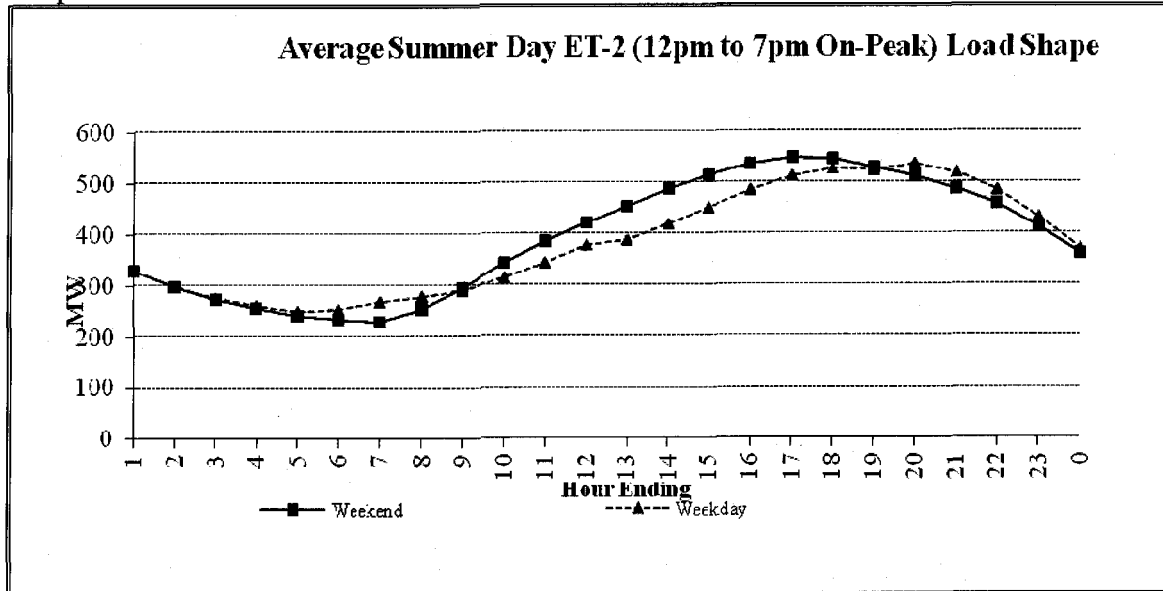
Rate	Average Annual Customers	Bill Savings Compared with non-TOU rate, E-12	Average % Bill Savings per Customer,
ET-2	110,232	\$ 51,203,000	19%
ECT-2	37,304	\$ 42,569,000	26%
Total	147,535	\$ 93,772,000	22%

1. ET-2 and ECT-2 savings are estimated from customer monthly billing determinants and the rates that were in effect during the report period.
2. Results for December 2009 through November 2010.

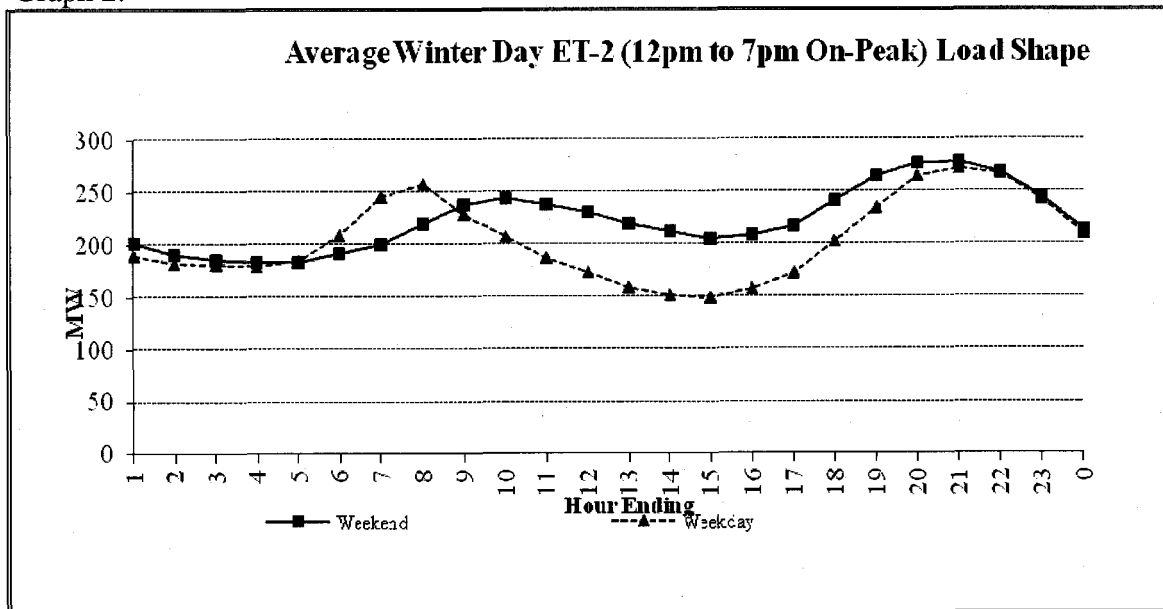
## Appendix A: LOAD SHAPES

The following load shapes display the average summer and winter usage for all customers who take service under the listed TOU rate.

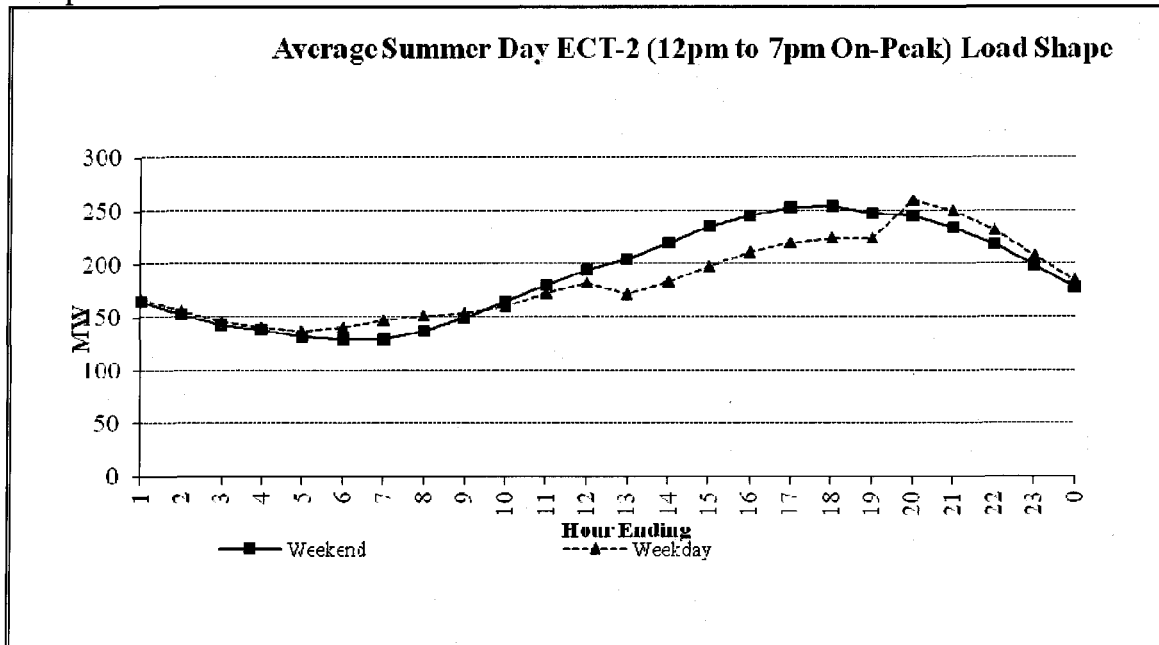
Graph 1.



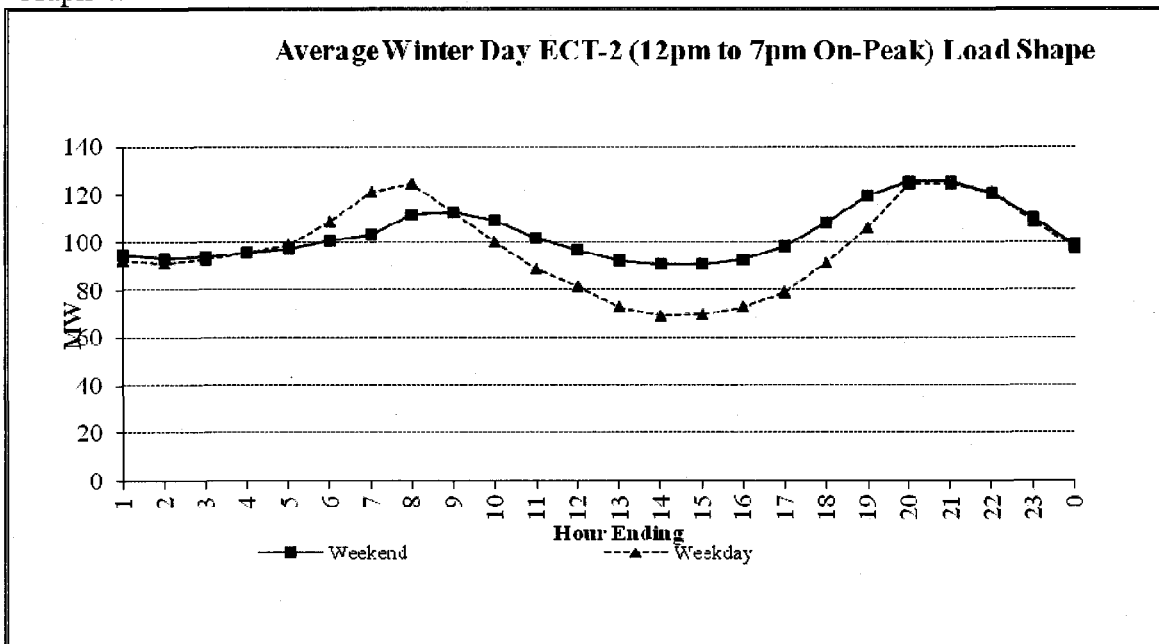
Graph 2.



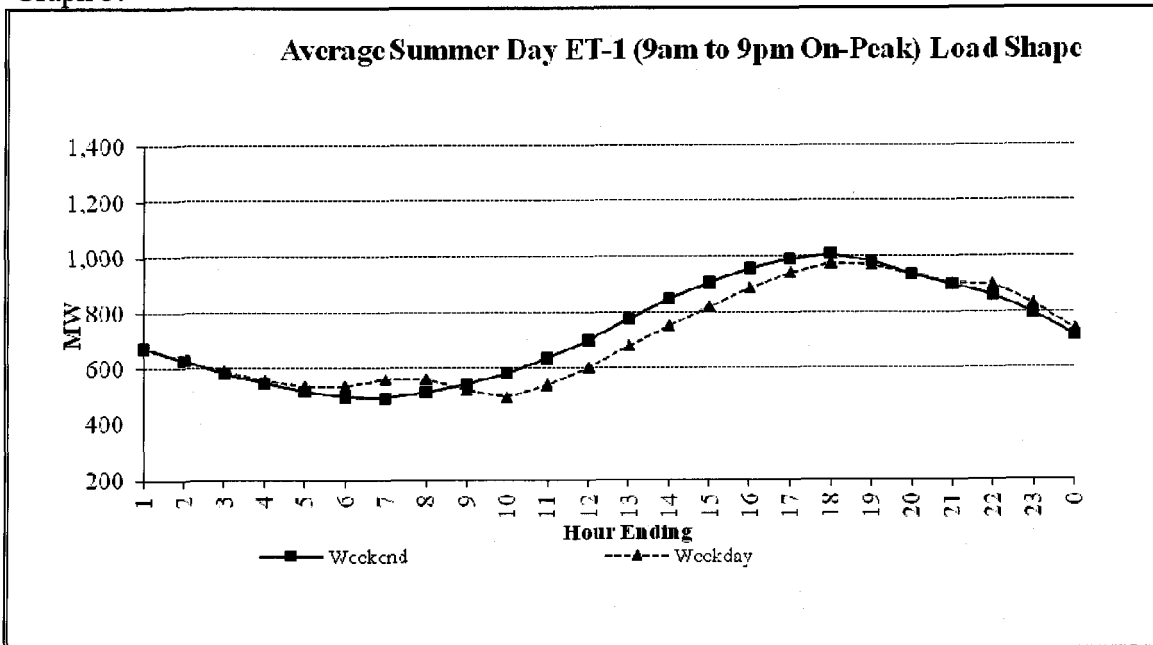
Graph 3.



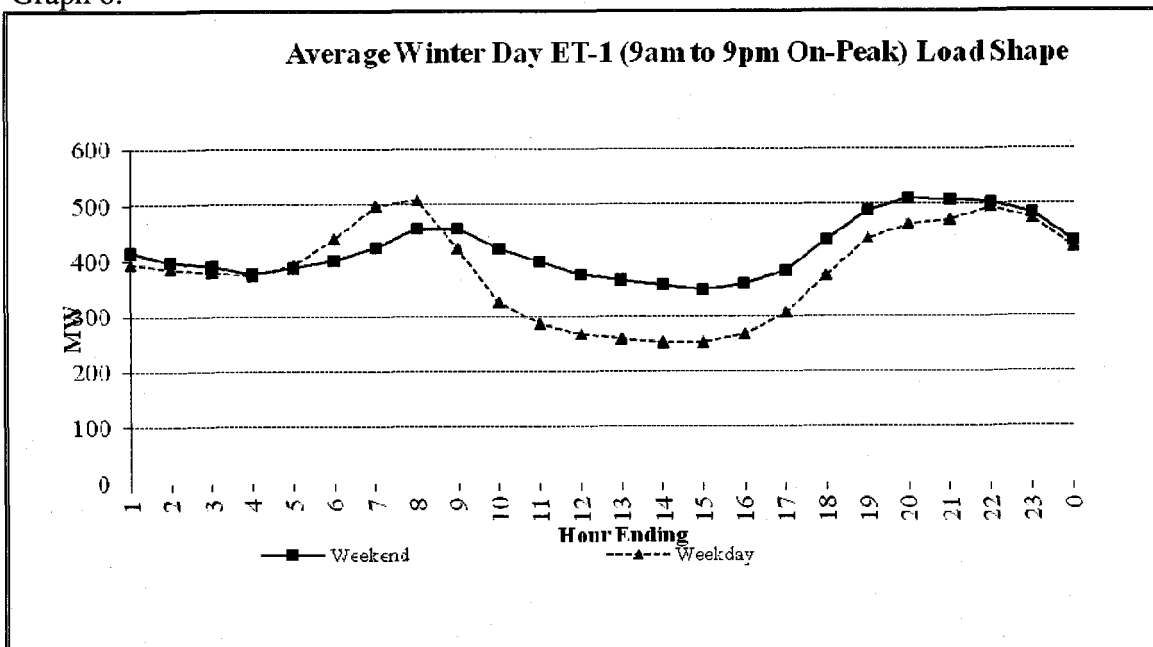
Graph 4.



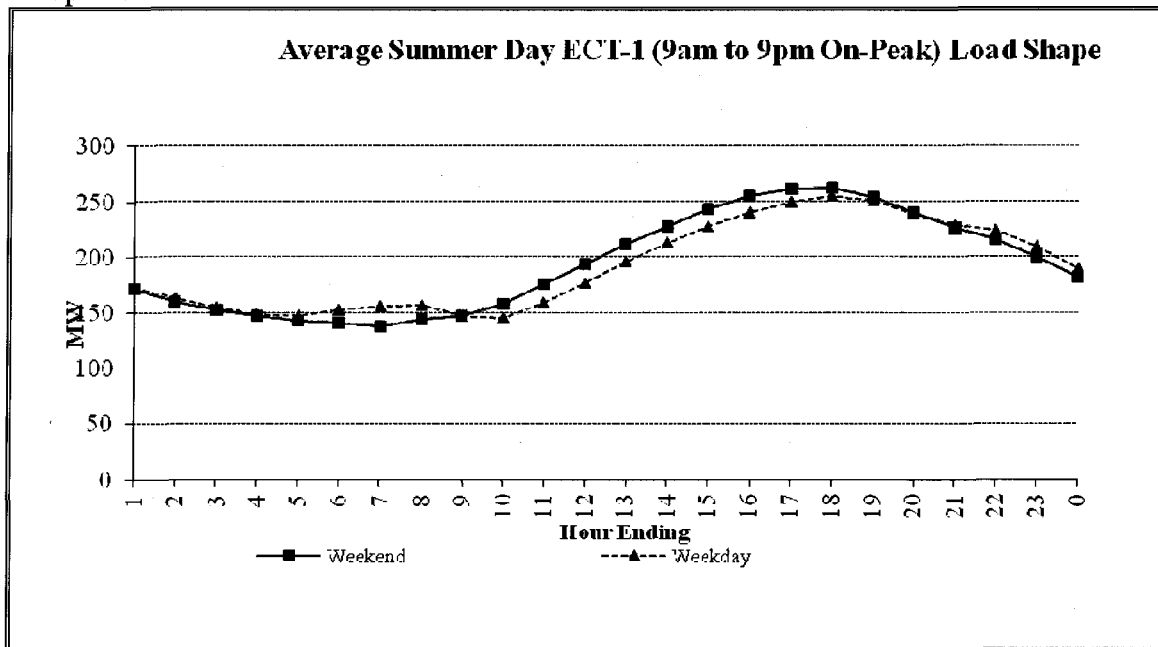
Graph 5.



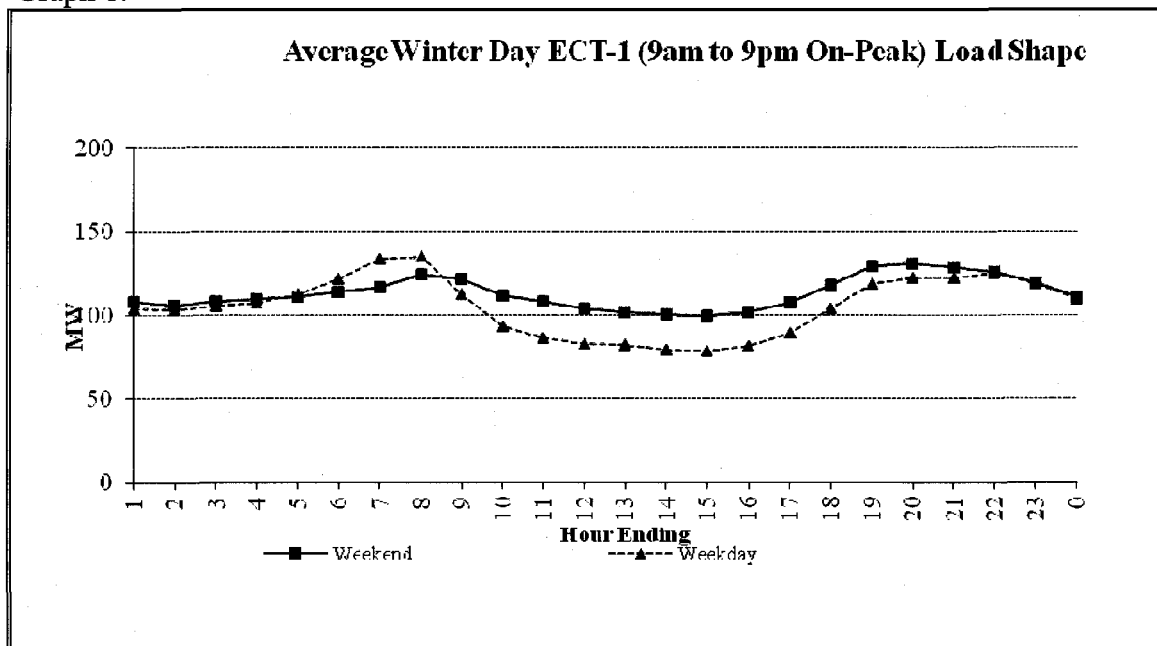
Graph 6.



Graph 7.



Graph 8.





**Arizona Public Service Company  
Residential Time-of-use Rates ET-2, ECT-2  
Compliance Report, Decision No. 68645, Docket  
No. E-01345A-05-0674  
Initial Filing, Docket No E-01345A- 07-0448  
January 29, 2010**

**Revised**

**Arizona Public Service Company**  
**Residential Time-of-use Rates ET-2, ECT-2**  
**Compliance Report, Decision No. 68645, Docket No. E-01345A-05-0674**  
**Initial Filing, Docket No E-01345A- 07-0448**  
**January 29, 2010**

## **Background**

In July 2006, APS implemented the “series-2” residential time-of-use rate schedules, ET-2 and ECT-2, which have an on-peak period of noon to 7:00 p.m. Rate Schedule ET-2 has on-peak and off-peak energy charges. Rate Schedule ECT-2 has an on-peak demand charge in addition to on-peak and off-peak energy charges. The Company is also serving customers on the “series-1” residential time-of-use rate schedules, ET-1 and ECT-1R, which have an on-peak time period of 9:00 a.m. to 9:00 p.m. The series-1 time-of-use rate schedules are closed to new customers effective January 1, 2010. However, existing customers can continue service on the rates.

## **Customer Participation**

As of December 2009, 88,983 customers are participating in the ET-2 rate. The year-over-year increase is 22,346 customers, a growth rate of 34%. For ECT-2, the participation is 33,819 customers and the year-over-year increase is 7,859, which is a growth rate of 30%. Overall, as of December 2009, the series-2 time-of-use rates have a total participation level of 122,802. This represents a year-over-year increase in customer participation of 30,205, which is a 32.6% increase.

## **Load Shapes**

Average daily load shapes for the winter and summer seasons are derived from recorded load research data. The summer seasonal load shapes consist of hourly load data from May 2009 through October 2009. The winter load shape includes data from December 2008 through April 2009 and November 2009. The attached load shapes are provided for weekday and weekend days. For comparison, the load shapes for rate schedules ET-1 and ECT-1R are also provided. See Graphs 1 through 8 in Appendix A.

## **Peak Usage and Shifting**

The ET-2 and ECT-2 summer weekday load shapes show a modest increase in usage after 7:00 p.m., when the on-peak period expires, which indicates that usage is being shifted to the off-peak hours. This impact is more pronounced for the ECT-2 rate, which has an on-peak demand charge in addition to on-peak and off-peak energy charges.

In addition, as shown in Table 1, the percent kWh consumed during the noon to 7:00 p.m. on peak period for the summer season is approximately 25% for ET-2 and 23% for ECT-2, based on load research data. By comparison, the summer on-peak usage for the same time period (noon to 7:00 p.m.) for rate schedule ET-1 and ECT-1R, which have a 12 hour on-peak period, is approximately 27% and 25% respectively. This suggests that although the on-peak periods differ between the series-1 and series-2 time-of-use rates, the participants on the series-2 time-of-use rates are displaying similar, but slightly lower,

summer on-peak consumption pattern and slightly more shifting of energy to the off-peak period when compared with the series-1 time-of-use rates.

Table 1.

**Peak Consumption  
(12pm to 7pm)  
Time-Of-Use Rates**

Rate Schedule	On-Peak Usage – Summer	On-Peak Usage – Winter
ET-2	25%	19%
ECT-2	23%	17%
ET-1	27%	19%
ECT-1R	25%	18%

1. ET-1 and ECT-1R on-peak usage are based on same on-peak hours as ET-2 and ECT-2.

### Customer Bill Savings

As depicted in Table 2, customer savings from the series-2 time-of-use rates are significant when compared to the estimated revenue that participating customers would have paid under the standard non-time-of-use rate E-12. The total estimated bill savings is \$14,586,000 for ET-2, and \$14,308,000 for ECT-2, for a combined savings of \$28,894,000 or 21%.

Table 2.

**Estimated Customer Bill Savings  
Time-of-use Rates  
(ET-2 and ECT-2)**

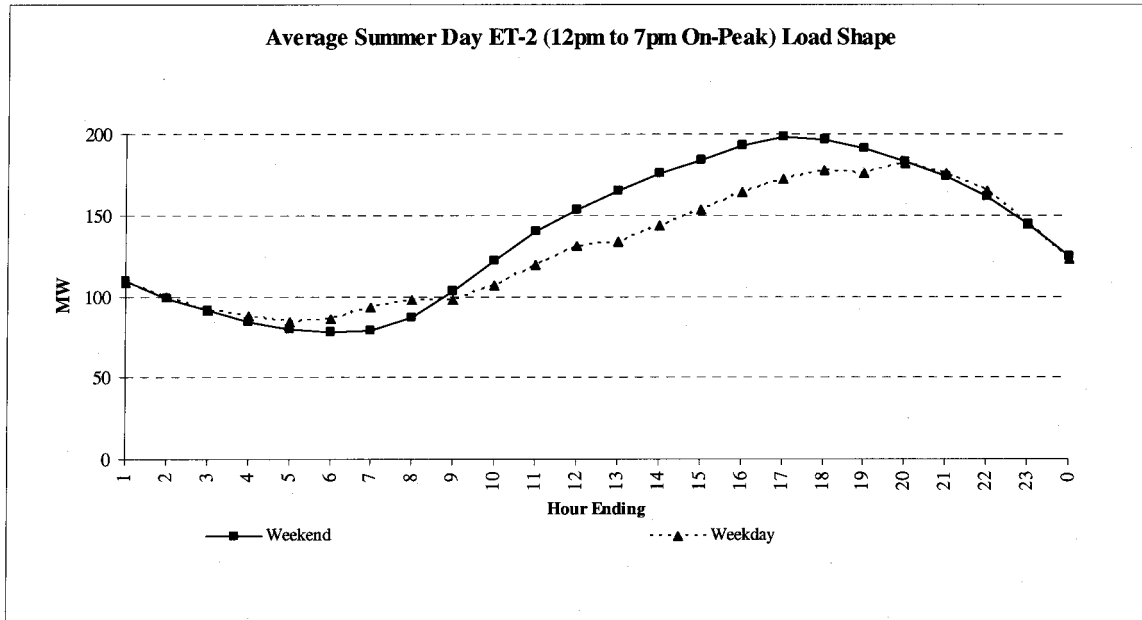
Rate	Average Annual Customers	Bill Savings Compared with non-TOU rate, E-12	Average % Bill Savings per Customer,
ET-2	76,953	\$ <del>14,586,000</del> \$29,171,000	17%
ECT-2	30,206	\$ <del>14,308,000</del> \$28,616,000	25%
Total	107,159	\$ <del>28,894,000</del> \$57,787,000	21%

1. ET-2 and ECT-2 savings are estimated from customer monthly billing determinants and the rates that were in effect during the report period.
2. Results for December 2008 through November 2009.

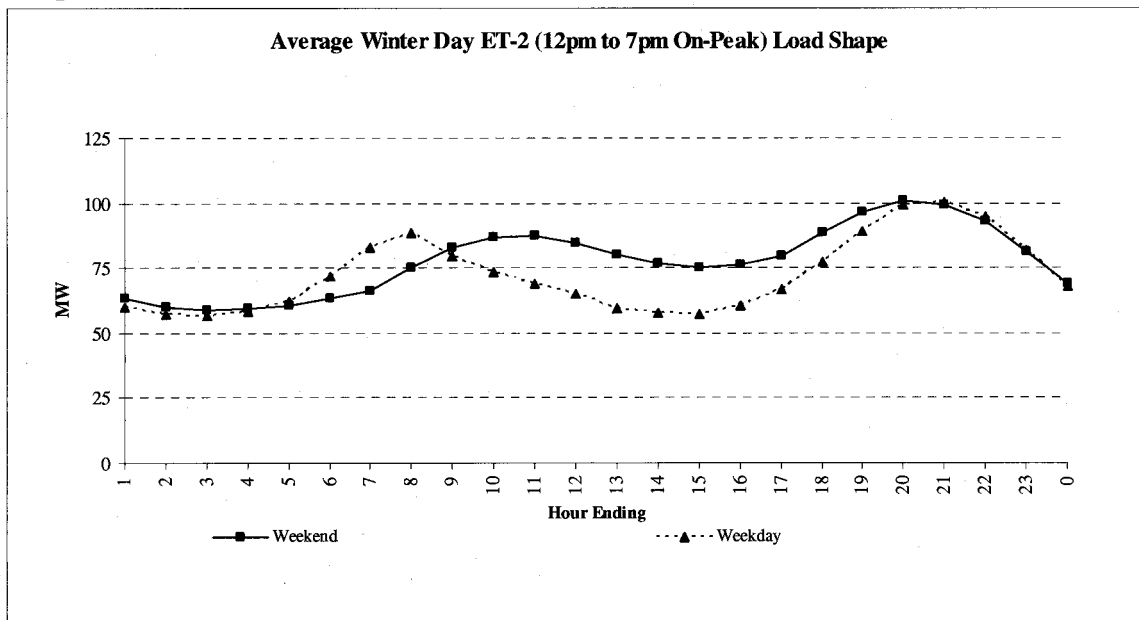
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The following load shapes display the average summer and winter usage for all customers who take service under the listed TOU rate.

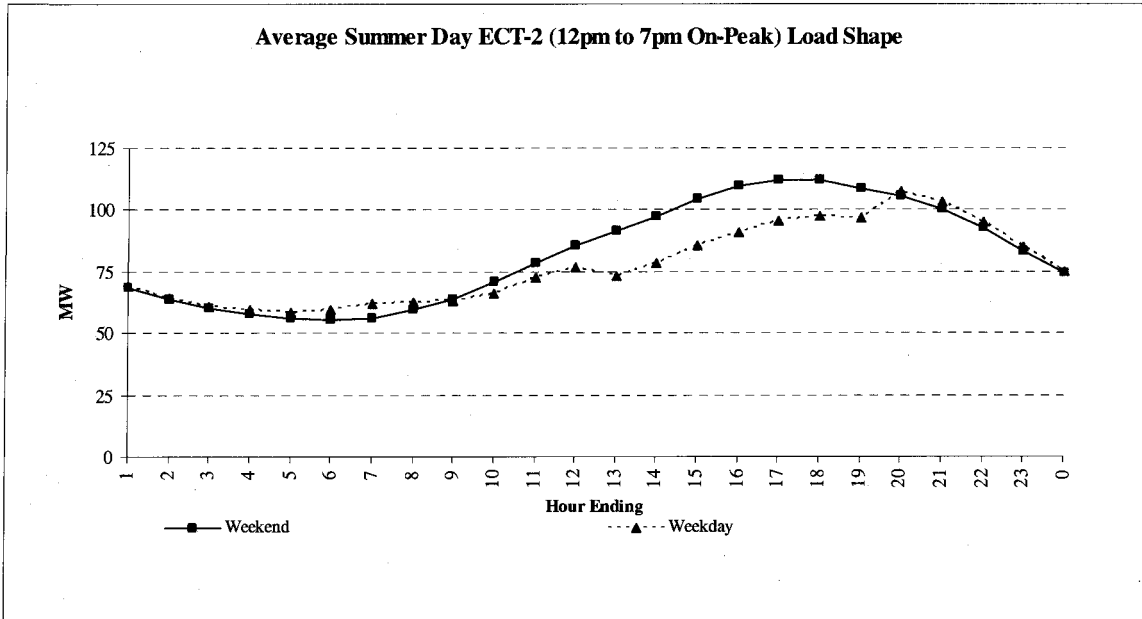
Graph 1.



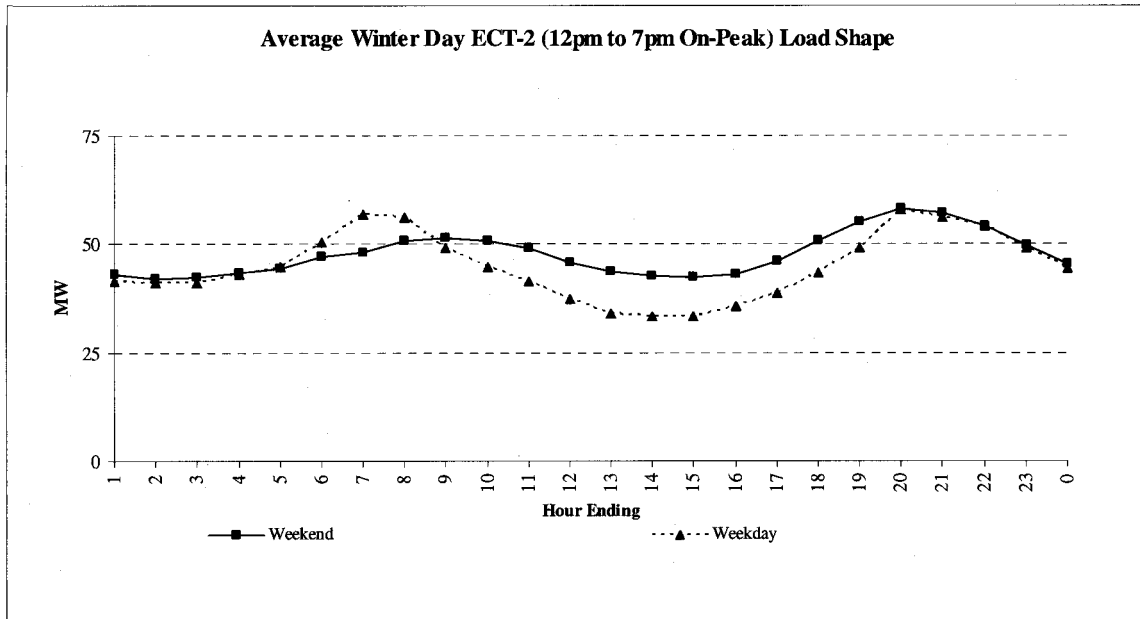
Graph 2.



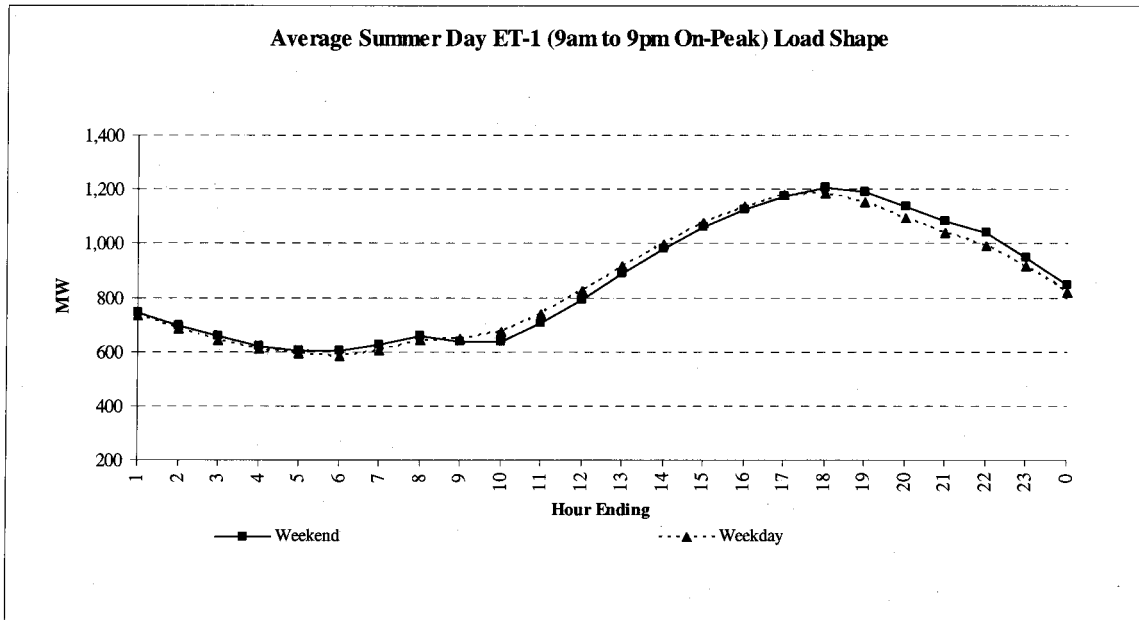
Graph 3.



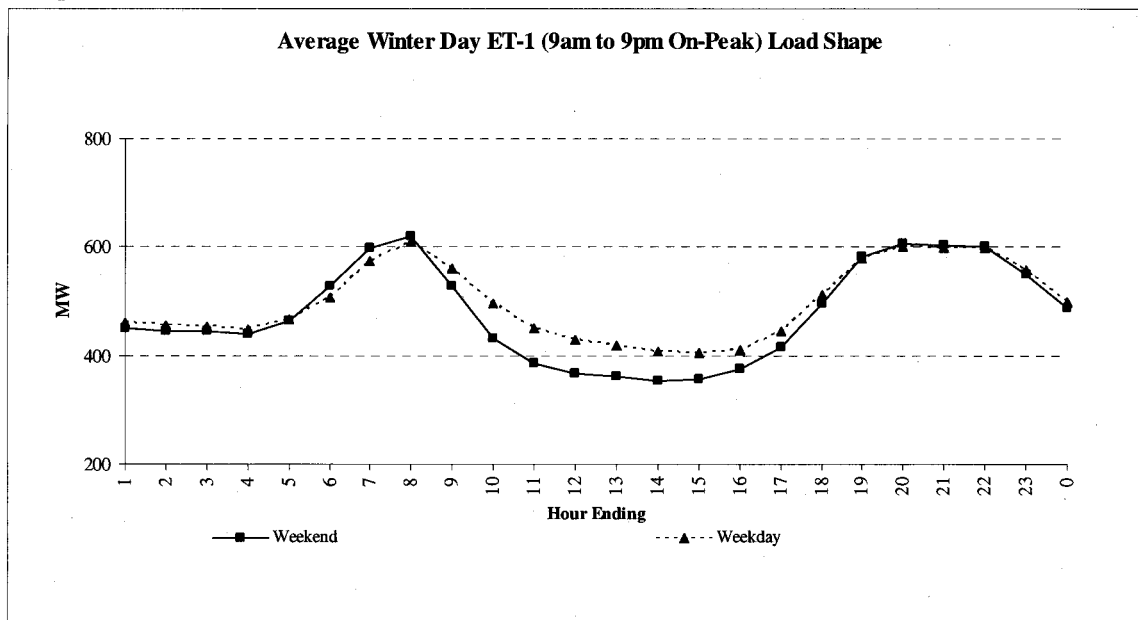
Graph 4.



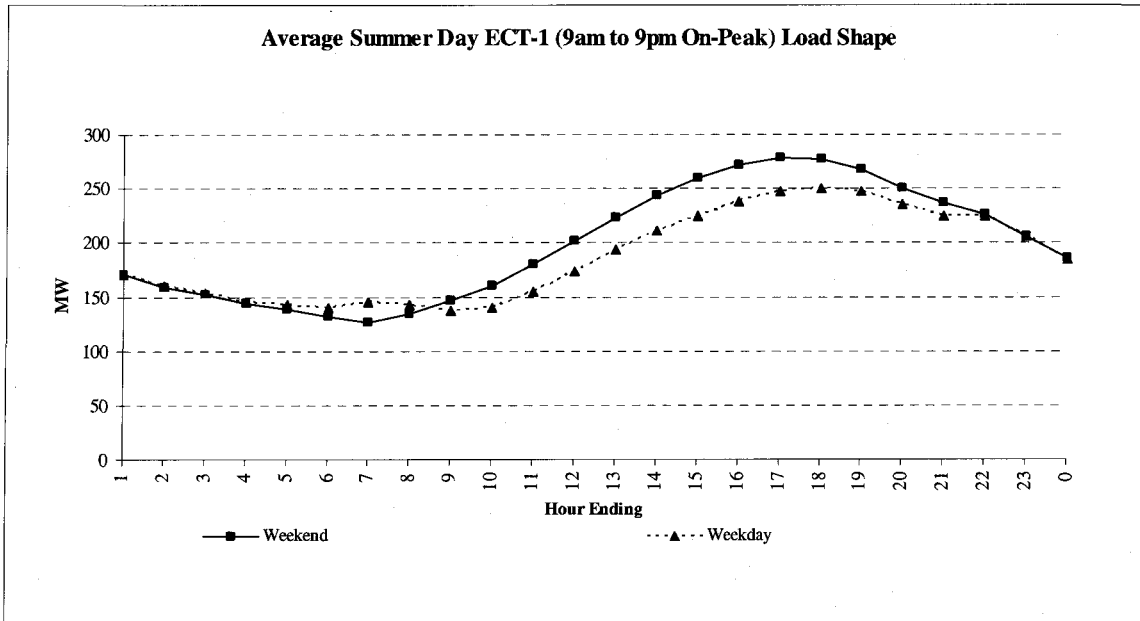
Graph 5.



Graph 6.



Graph 7.



Graph 8.

